Claims:

1. The method for detecting toxic materials in water by using the electrochemically active microorganism.

2. The method for detecting toxic materials in water comprising the steps of:

a. determining the electrochemical signals generated from the microbial fuel cell;

b. introducing a sample to the above microbial fuel cell; and

c. determining the degree of electrochemical signal changes from the microbial fuel cell.

3. The device for detecting toxic materials in water of claim 2 further comprising a step of screening out the suspension and unwanted materials in the sample before introducing the sample to the above microbial fuel cell.

4. The device for detecting toxic materials in water comprising:

a. a sample inlet pump(1);

b. a first pretreatment tank(2) treating the sample;

c. a microbial fuel cell(6) which senses the changes in the current due to the entry of the toxic materials; and

d. a PC and controlling part(11) which control the value of the signals and automatically determine the toxicity.

5. The device for detecting toxic materials in water of claim 4 further comprising a solenoid valve(5) which changes the flow of the sample when sensing the entry of the toxic materials, and sample-gathering vessel(4) which intakes and stores the sample when the entry of toxic materials are sensed.